

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**(Attorney Docket № 14218US02)**

In the Application of:

## Martin Lund

Serial No. 10/646,976

Filed: August 22, 2003

**For: A METHOD AND SYSTEM TO  
PROVIDE PHYSICAL PORT  
SECURITY IN A DIGITAL  
COMMUNICATION SYSTEM**

Examiner: Joseph T. Pan

Group Art Unit: 2135

Confirmation No. 1056

**Electronically Filed on 01-AUG-2007**

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The Applicant requests review of the final rejection in the above-identified application, stated in the final Office Action mailed on April 2, 2007 (hereinafter, the Final Office Action) with a **period of reply through August 2, 2007, pursuant to the attached request for one-month extension**. The Applicant also requests review of the arguments stated on page 2 of the Advisory Office Action mailed on June 28, 2007 (hereinafter, the Advisory Office Action). No amendments are being filed with this request.

**This request is being filed with a Notice of Appeal.** The review is being requested for the reasons stated on the attached sheets.

## REMARKS

Claims 1-7, 10-18 and 21-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,951,651, issued to Lakshman et al. (hereinafter, Lakshman), in view of U.S. Patent No. 5,689,505, issued to Chiussi, et al. (hereinafter, Chiussi). Claims 8-9 and 19-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lakshman in view of Chiussi and further in view of U.S. Patent No. 7,143,132, issued to Klein, et al. (hereinafter, Klein). The Applicant respectfully traverses these rejections at least based on the following remarks.

### I. Examiner's Arguments in the Advisory Office Action

The Applicant points out that the Advisory Office Action has not responded to any of the detailed arguments stated by the Applicant in the May 29, 2007 response. Instead, page 2 of the Advisory Office Action is restating the Examiner's arguments from the Final Office Action and is extensively citing from Lakshman. The Applicant respectfully maintains all arguments stated in pages 9-16 of the May 29, 2007 response.

### II. The Proposed Combination of Lakshman and Chiussi Does Not Render Claims 1-7, 10-18 and 21-24 Unpatentable

#### A. The Proposed Combination Does Not Teach or Suggest "Generating A Destination Port Bit Map Based On the Destination Address Information"

With regard to the rejection of independent claim 1 under 103(a), the Applicant submits that the combination of Lakshman and Chiussi does not disclose or suggest at least the limitation of "generating a destination port bit map **based on the destination address information contained in said frame of digital data,**" as recited by the Applicant in independent claim 1 (emphasis added). Regarding claim 1, the Office Action states the following:

Lakshman teaches: A method of providing physical port security in a digital communication system, comprising:

receiving a frame of digital data at a network device (see figure 1, elements 30 'source address', 35 'destination address'; figure 7, element 120 'packet received?'; column 1, lines 58-64; and column 5, lines 35-64 of Lakshman);

generating a destination port bit map based on the destination address information contained in said frame of digital data (see e.g. figure 1, element 35 'destination address'; figure 7, element 130a 'generate bitmap vector (k=1)'; column 1, lines 58-64; and column 5, lines 35-64 of Lakshman);

See the Final Office Action, pages 2-3. The Examiner refers for support to Figures 1 and 7 of Lakshman. Figure 1 of Lakshman discloses an implementation of an IP packet header, which includes a source address 30 and a destination address 35. Figure 7 of Lakshman discloses a router filtering algorithm based on existing router filter specifications. The Examiner is equating steps 130 of the filtering algorithm of Figure 7 with the generating of a destination port bit map limitation in Applicant's claim 1. The Applicant respectfully disagrees. Steps 130a, ..., 130n of Lakshman generate bitmap vectors for each of the n potential filters. The n bitmap vectors are then used to compute a resultant vector, which determines the filter rule of highest priority to be applied to the data packet. See Lakshman, col. 5, lines 50-64. The Applicant points out that the bitmap vectors of Lakshman are used to determine which filtering rule is of highest priority. **The bitmap vectors of Lakshman are not used for generating a destination port bitmap. Furthermore, the destination address information 35 of Lakshman is not used for generating a destination port bitmap. In fact, the destination address information 35 of Lakshman is not used in any way during the generation of the bitmap vectors (steps 130a, ..., 130n) as disclosed in Figure 7 of Lakshman.**

Chiussi does not remedy the above stated deficiencies of Lakshman. Therefore, the Applicant maintains that the combination of Lakshman and Chiussi does not disclose or suggest at least the limitation of "generating a destination port bit map based on the destination address information contained in said frame of digital data," as recited by the Applicant in independent claim 1.

Furthermore with regard to the rejection of independent claim 1 under 103(a), the Applicant submits that the combination of Lakshman and Chiussi does not disclose or suggest at least the limitation of "comparing said destination port bit map with a physical port security bit map to generate a bit map of allowed destination ports, wherein said physical port security bit map is generated based on information in said received frame of digital data," as recited by the Applicant in independent claim 1.

Regarding claim 1, the Office Action states the following:

Lakshman teaches: A method of providing physical port security in a digital communication system, comprising:

...

comparing said destination port bit map with a physical port security bit map to generate a bit map of allowed destination ports, wherein said physical port security bit map is generated based on information in said received frame of digital data (see figure 7, element 135 'computer intersection of all bitmap vectors'; column 1, lines 58-64; and column 5, lines 35-64 of Lakshman);

See the Final Office Action at pages 2-3. The Examiner refers for support to Figure 7 of Lakshman. Figure 7 of Lakshman discloses a router filtering algorithm based on existing router filter specifications. The Examiner is equating step 135 of the filtering algorithm of Figure 7 with the comparing step in Applicant's claim 1. The Applicant respectfully disagrees. Steps 130a, ..., 130n of Lakshman generate bitmap vectors for each of the n potential filters. In step 135, the n bitmap vectors are used to compute a resultant vector, which determines the filter rule of highest priority to be applied to the data packet. Furthermore, the filtering algorithm of Figure 7, as well as the remaining portion of Lakshman, does not disclose any generation of a bit map of allowed destination ports. See Lakshman, col. 5, lines 50-64. The Applicant points out that **the router filtering algorithm of Figure 7, including step 135, does not utilize any comparing of a destination port bit map with a physical port security bit map so that a bit map of allowed destination ports is generated**, as recited in Applicant's claim 1.

Chiussi does not remedy the above stated deficiencies of Lakshman. Therefore, the Applicant maintains that the combination of Lakshman and Chiussi does not disclose or suggest at least the limitation of "comparing said destination port bit map with a physical port security bit map to generate a bit map of allowed destination ports, wherein said physical port security bit map is generated based on information in said received frame of digital data," as recited by the Applicant in independent claim 1.

The Applicant submits that claim 1 is allowable. Independent claim 12 is similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claim 12 is also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

#### **B. Rejection of Dependent Claims 2-7, 10-11, 13-18 and 21-24**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Lakshman in view of Chiussi has been overcome and requests that the rejection be withdrawn. Additionally, claims 2-7, 10-11, 13-18 and 21-24 depend from independent claims 1 and 12, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1-7, 10-11, 12-18 and 21-24.

**III. The Proposed Combination of Lakshman, Chiussi and Klein Does Not Render Claims 8-9 and 19-20 Unpatentable**

Claims 8-9 and 19-20 depend from independent claims 1 and 12, respectively, and are, consequently, also respectfully submitted to be allowable at least for the reasons stated above with regard to allowability of claim 1. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 8-9 and 19-20.

**IV. Conclusion**

The Applicant respectfully submits that all claims 1-24 of the present application should be in condition for allowance at least for the reasons discussed above and request that the outstanding rejections be reconsidered and withdrawn. The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: 01-AUG-2007

By: 

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